SHIP OPERATIONS

	($ in Millions)									
	FY 2002 Actual	Price Growth	Program Growth	FY 2003 Estimate	Price Growth	Program Growth	FY 2004 Estimate	Price Growth	Program Growth	FY 2005 Estimate
Active Forces	**7,864.1**	**+50.4**	**+383.9**	**8,298.4**	**+10.8**	**-554.0**	**7,755.2**	**+273.9**	**+22.6**	**8,051.7**
Mission and Other Ship Operations	2,500.6	-19.6	-31.5	2,449.5	-17.9	+54.0	2,485.6	+43.6	-16.7	2,512.5
Operational Support and Training	493.2	+12.9	+80.0	586.1	+7.2	+21.2	614.5	+12.2	+42.5	669.2
Intermediate Maintenance	391.4	+11.3	-5.7	397.0	+0.6	-397.6	-	-	-	-
Depot Maintenance	3,142.7	+22.8	+290.6	3,456.1	+8.1	+103.3	3,567.5	+193.4	-20.4	3,740.5
Depot Operations Support	1,336.2	+23.0	+50.5	1,409.7	+12.8	-334.9	1,087.6	+24.7	+17.2	1,129.5
Reserve Forces	**135.3**	**+2.7**	**+25.9**	**163.9**	**-1.2**	**-8.0**	**154.7**	**+3.4**	**-10.3**	**147.8**
Mission and Other Ship Operations	57.1	+1.2	+10.0	68.3	-2.3	+1.2	67.2	+1.7	-1.0	67.9
Operational Support and Training	0.5	-	+0.1	0.6	-	-0.1	0.5	-	-	0.5
Intermediate Maintenance	10.6	+0.7	+0.9	12.2	+0.1	-12.3	-	-	-	-
Depot Maintenance	65.1	+0.8	+13.9	79.8	+1.0	+2.8	83.6	+1.6	-9.4	75.8
Depot Operations Support	2.0	-	+1.0	3.0	-	+0.4	3.4	+0.1	+0.1	3.6
Total	**7,999.4**	**+53.1**	**+409.8**	**8,462.3**	**+9.6**	**-562.0**	**7,909.9**	**+277.3**	**+12.3**	**8,199.5**

Ship Operations funds the Active and Reserve operating tempo (OPTEMPO), intermediate maintenance, depot level maintenance, engineering support, and logistical support to maintain and deploy combat-ready ships to ensure control of the sea. From this activity the Navy purchases ship fuel, repair parts, utilities, consumable supplies, and repair maintenance at public and private shipyards, as well as Fleet intermediate maintenance facilities. In addition, this category includes the cost to charter logistics support and other ships from the Military Sealift Command (MSC), and includes payments to the Department of Energy (DOE) for consumed nuclear fuel as well as storage and processing of expended nuclear cores. The FY 2004 Ship Operations budget decreases by $552.2 million from the FY 2003 level. The decrease is composed of a price increase of $9.6 million and net program decreases of $-562.0 million

(-6.6 percent). The FY 2004 budget request provides $7,755.2 million for Active ship operations, which includes price growth of $10.8 million and program decreases of $554.0 million (-6.7 percent) below the FY 2003 level. The key components of the $-554.0 million Active program change are described below:

- $54.0 million in the Mission and Other Ship Operations for per diem costs due to an additional day in 2004 and the transition of AOE ships to the Military Sealift Command (MSC) ($39.1 million), Force Protection costs for MSC ships operating independently in Non-Navy ports ($12.0 million), refinement of NMCI schedule ($5.1 million), and post COLE/9-11 port vulnerability assessments and phased replacement force protection costs ($10.2 million), offset by decreases in ship years and operating months ($-12.4 million).
- $21.2 million in the Operational Support and Training program associated primarily with increases for the start up of the Navy Environmental Protection Support Service Program ($18.3 million) AEGIS ship support ($10.4 million), and support for the introduction of Virginia class submarines to the fleet ($5.5 million) offset by decreases for one time Congressional adds ($-9.3 million) and efficiency savings ($-3.7 million).
- $-294.2 million in Ship Maintenance (Depot and Intermediate Level) associated with the realignment of RADIC (Radiation Detection, Indication & Computation) and FAMI (Forces Afloat Management Improvement) programs to Depot Operations Support ($-14.2 million), decreased notional requirements for depot maintenance availabilities ($-193.2 million), a decreased level of emergent level repairs corresponding to a decrease in ship operating months ($-47.3 million), decrease in miscellaneous and other restricted/technical availabilities (ORA/TA) ($-39.9 million); Realignment of Intermediate Maintenance reflects regionalization of ship maintenance activities.
- $-334.9 million in Depot Operations Support, comprised of decreased midlife work on *Tarawa* Class LHAs and decrease of two LPD 4 sustainment availabilities ($-111.5 million); decrease in Fleet Modernization Program efforts for various ship classes ($-57.9 million); decrease in Enterprise Resource Planning (ERP) reflecting scheduled completion of national systems, lower costs at shore facility installations and use of business process reengineering ($-69.7 million); decreased funding for off-ship berthing during CNO availabilities and for barge overhauls ($-42.6 million); realignment of AT/FP (Anti-Terrorism/Force Protection) requirements from Surface and Amphibious Ship Support to Hull, Mechanical and Electrical Support (4B5N) ($-11.8 million), decreases for one-time Congressional adds ($-33.6 million), reductions due to mission funding Puget Sound NSY ($-11.8 million), and other depot support efficiencies ($-8.3 million), offset by the realignment of RADIAC and FAMI from Ship Maintenance ($14.2 million).

The FY 2004 Operation and Maintenance, Navy Reserve (OMNR) Ship Operations request includes a pricing decrease of $1.2 million, and a program decrease of $8.0 million above the FY 2003 level, associated primarily with replacing three old Type I frigates with Type III frigates from the Active component, and a decrease in depot and intermediate maintenance.

Ship Inventory (End of Year)	FY 2002 Actual	Change	FY 2003 Estimate	Change	FY 2004 Estimate	Change	FY 2005 Estimate
Navy Active	257	-12	245	-7	238	-1	238
MSC Charter/Support	41	+1	42	-3	39	+1	39
Battle Force Ships (Active)	**298**	**-11**	**287**	**-10**	**277**	**-**	**277**
Reserve Battle Force	15	-1	14	+1	15	-	15
Reserve Non-Battle Force	10	-	10	-	10	-	10
Naval Reserve Force	**25**	**-1**	**24**	**+1**	**25**	**-**	**25**
Total Battle Force Ships (Active plus Reserve)	**313**	**-12**	**301**	**-9**	**292**	**-**	**292**

The size of the deployable Battle Force declines from FY 2002 to FY 2005 as more multipurpose capability ships are added to the naval inventory and an increased portion of the combat logistics force mission is performed by the Military Sealift Command, which is funded through the Defense Working Capital Fund.

Battle Force Ships Inventory by Category	FY 2003 Ending Inventory	Gains	Losses	FY 2004 Ending Inventory
Aircraft Carriers	12	+1	-1	12
Strategic (Fleet Ballistic Missile Submarines)	16	-	-2	14
Surface Combatants	106	+5	-8	103
Nuclear Attack Submarines	54	+2	-2	54
Guided Missile Submarines	2	+2	-	4
Amphibious Warfare Ships	37	-	-2	35
Mine Warfare, Patrol	17	-	-	17
Support Ships	57	+1	-5	53
Total	**301**	**+10**	**-19**	**292**

The total number of Battle Force ships decreases by nine between FY 2003 and FY 2004. In FY 2004, the Navy gains two SSN's (1 Virginia & 1 Seawolf Class), four DDGs, and one reserve FFGs, and loses five DDs, two CG's, one FFGs, two LSD's, two SSN's,

and four MSC TAGOS support ships**.** Also in FY 2004, the Navy transfers a fast combat support ship (AOE) to the Military Sealift Command which is displayed as one loss and one gain in the Support Ships line and the Navy converts two SSBN's to SSGN's displayed as gains and losses in their respective categories. The Navy will continue to maintain a force of 12 aircraft carriers in FY 2004.

	FY 2002 Actual	Change	FY 2003 Estimate	Change	FY 2004 Estimate	Change	FY 2005 Estimate
Shipyears							
Conventional (OMN)/1	176	+8	184	-9	175	-15	160
Nuclear (OMN)	80	+1	81	+1	82	-	82
Conventional (OMNR)/2	25	-1	24	-	24	-	24

1/ Operation and Maintenance, Navy
2/ Operation and Maintenance, Navy Reserve

Shipyear data provides a more accurate indicator of the overall force level for that year. A shipyear measures that portion of a fiscal year that a ship serves in the fleet. For example, a ship decommissioning on June 30th would have 0.75 shipyears for that fiscal year (October through June) – whereas the end-of-year ship inventory would be zero.

The changes from FY 2003 to FY 2004 for the Conventional Forces reflect the net loss of ten conventional battle force ships. The Nuclear Forces are reflective of the gain of one CVN late in FY 2003.

	FY 2002 Actual	Change	FY 2003 Estimate	Change	FY 2004 Estimate	Change	FY 2005 Estimate
Operating Tempo (Underway Days Per Quarter/Ship)							
Deployed Fleet (Readiness Goal)	54	-	54	-	54	-	54
Deployed Fleet (Including Southwest Asia Military)	65	-11	54	-	54	-	54
Nondeployed Fleet	28	-	28	-	28	-	28

Sustaining the ship operating tempo is critical to meeting global forward-deployed missions and overseas presence commitments of the deployed fleet and to maintain a combat ready and rapidly deployable force in the nondeployed fleet. The budget request meets the Navy's peacetime readiness goal of 54 underway days per quarter for the deployed fleet and 28 underway days per quarter for the non-deployed fleet.

	FY 2002 Actual	Change	FY 2003 Estimate	Change	FY 2004 Estimate	Change	FY 2005 Estimate
Operating Months (Less Charter Ships)							
Conventional (OMN)	1,830	+110	1,940	-55	1,885	-241	1,644
Nuclear (OMN)	841	-25	816	-32	784	-38	746
Conventional (OMNR)	279	-11	268	+6	274	-17	255

Operating month data is also a good measure of ship operations costs. Operating months reflect the part of the fiscal year that a ship is fully available for missions. The complement of operating months is repair months. For example, a ship not available for missions while undergoing a 3-month repair period would have 9 operating months and 3 repair months (assuming it was not to be commissioned or decommissioned in that particular year).

	FY 2002 Actual	Change	FY 2003 Estimate	Change	FY 2004 Estimate	Change	FY 2005 Estimate
Underway Steaming Hours (000s)							
Conventional (OMN)	510	-27	483	-20	463	-38	425
Nuclear (OMN)	25	-1	24	+3	27	-4	23
Conventional (OMNR)	36	+7	43	+1	44	-	44

Underway steaming hours display the estimated total number of hours, ships in the battle force are underway. Total steaming hours is dependent upon operating tempo and operating months. Fuel consumed will generally change directly with steaming hours for conventionally powered ships (although fuel burn rates vary widely between ship classes).

Ship Depot Level Maintenance

Ship Depot Level Maintenance requires skills or facilities beyond the capacity or capability of organizational or intermediate level activities. Public and Private Shipyards, Naval Ship Repair Facilities, and Equipment Depot Maintenance Facilities perform Ship Depot Maintenance. Ships are assigned maintenance availabilities in accordance with the class maintenance plan established for the ship class. Class maintenance plans vary but always include both shorter non-docking availabilities and longer docking availabilities. The primary categories of availabilities follow:

Overhauls are docking availabilities, normally exceeding six months in duration, that involve major repairs and alterations. Phased Maintenance Availabilities (PMA) and Selected Restricted Availabilities (SRA) are relatively short and highly intensive averaging two to three months in duration during which both alterations and repairs are typically performed. They may be docking or non-docking. Phased Incremental Availabilities (PIA) are availabilities specific to USS NIMITZ class Aircraft Carriers during which both alterations and repairs are typically performed. They may be docking or non-docking.

Three categories of depot level maintenance are performed outside of scheduled availabilities. Emergent Restricted Availabilities/Technical Availabilities (RA/TA) is used to repair discrepancies that must be corrected prior to the next scheduled availability. Other RA/TA is maintenance planned for execution between scheduled availabilities meant to maintain ships systems fully operational. Continuous Maintenance allows flexible execution of required Surface Ship depot level work during in port periods.

	FY 2002 Actual	Change	FY 2003 Estimate	Change	FY 2004 Estimate	Change	FY 2005 Estimate
Ship Depot Level Maintenance							
Active Forces							
Overhauls	4	-1	3	+1	4	+1	5
Selected Restricted Availability	67	-10	57	-3	54	+4	58
Phased Maintenance Availability	26	+1	27	-14	13	+2	15
Phased Incremental Availability	3	-	3	-1	2	+1	3
Reserve Forces							
Selected Restricted Availability	25	-	25	+1	26	-13	12
Phased Maintenance Availability	12	+9	21	-8	13	+7	20